



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

AUG 31 2011

OFFICE OF  
AIR AND RADIATION

Mr. Kevin Brown  
Engine Control Systems  
Marketing & Regulatory Affairs Manager  
83 Commerce Valley Drive East  
Thornhill, Ontario  
L3T 7V1, Canada

Dear Mr. Brown:

The U.S. Environmental Protection Agency (EPA) has reviewed your request for verification of the Purifilter Plus M for EGR engines with model years 2003-2009, manufactured by International Truck and Engine Corporation. This technology incorporates a passively regenerating ECS Purifilter diesel particulate filter (with a new catalyst formulation), an electrical heating panel for periodic active regeneration and an electronic logger to monitor backpressure and temperature.

Based on our evaluation of the verification application and test data, EPA hereby verifies that this technology reduces emissions of certain criteria pollutants for the approved engine models and applications by the percentages shown in the table below. In addition, EPA verifies that this product meets the 2009 NO<sub>2</sub> emission limits. This verification is for the purposes of EPA's National Clean Diesel Campaign.

Technology	Engine Model/Application	Fuel, Max Sulfur (ppm)	Reductions (%)			
			PM	NO <sub>x</sub>	HC	CO
Purifilter Plus M (diesel particulate filter on the engine, electrical panel for active regeneration at the garage/maintenance yard)	Highway; light, medium, and heavy heavy-duty EGR engines manufactured by International Truck and Engine Corporation with model years 2003-2009	15	90	N/A	30	75

The following criteria must be met in order for appropriately retrofitted engines to achieve the aforementioned emission reductions:

1. As there may be variations from application to application, data-logging and a review of actual vehicle operating conditions are required to ensure Purifilter Plus M compatibility. ECS will provide a recommended schedule for active regeneration of the device.

2. The engine must be operated on ultra-low sulfur diesel fuel (ULSD) of 15 ppm or less.
3. The engine must be well maintained and not consume lubricating oil at a rate greater than that specified by the engine manufacturer.
4. The vehicle may not be equipped with an oil burning system and lube oil or other oils may not be mixed with the fuel.
5. ECS installs the Back-Pressure Monitor and Logger unit and the Remote Driver Display on all vehicles equipped with a Purifilter Plus M.

Information on the Purifilter Plus M technology, percent reductions, applicable engines, and in-use testing program will be posted on the EPA's National Clean Diesel Campaign/Diesel Retrofit Verification website (<http://www.epa.gov/retrofit/verif-list.htm>).

Thank you for participating in EPA's National Clean Diesel Campaign. If you have any questions or comments, please contact Julie Hawkins, of my staff, at (202) 343-9072.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jim Blubaugh".

Jim Blubaugh, Deputy Director  
Transportation and Regional Programs Division  
Office of Transportation and Air Quality